

### **REMARKS**

Applicant submits this Response in reply to the Official Action dated March 9, 2010. Applicant believes that the Response is fully responsive to the Official Action for at least the reasons set forth herein.

Applicant respectfully requests that this amendment submitted under 37 CFR § 1.114 along with a Request for Continued Examination (RCE) be entered and the examination of the application be continued.

Claims 4-8 and 12-25 are pending in the application, with claims 20, 23 and 24 being independent claims. Claims 24 and 25 are added. Support for new claim 24 can be found in original claims 1 and 9-12; support for new claim 25 can be found in original claim 13. Claims 2 and 3 are canceled herein; claims 1 and 9-11 have previously been canceled. Claims 20 and 23 are amended to recite an additional step of correcting the symbol stream by incorporating substitution of symbols in the symbol stream where prior knowledge of the symbol stream exists. Support for this amendment can be found in original claims 2 and 3, canceled herein. Claim 4 is amended to depend from claim 23, instead of canceled claim 3. Care has been taken to ensure no new matter is being entered.

### **Rejection of Claims Under 35 U.S.C. §103**

Claims 2-8 and 12-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mege et al., U.S. Pat. Pub. 2001/0005406 (hereinafter "Mege") in view of Critchlow, U.S. Patent No. 5,276,706, and further in view of Liu, U.S. Pat. Pub. 2005/0147188 and Tynderfeldt et al., U.S. Pat. Pub. 2008/0025266 (hereinafter "Tynderfeldt").

Applicant respectfully disagrees with the rejection and traverses with at least the following analysis.

Independent claims 20 and 23 are amended to recite a step of correcting the symbol stream by incorporating substitution of symbols in the symbol stream where prior knowledge of the symbol stream exists. None of the art of record in the application teaches or suggests this feature.

The Examiner asserts that Mege teaches incorporating substitution of symbols in the symbol stream where the symbol stream is known *a priori* (Office Action, page 5). Applicant respectfully disagrees. Mege teaches inserting symbols issued by the coder in those output by the source (paragraph [0085]), so that additional symbols occur in the output. Mege does not teach substitution of symbols, that is, replacement of symbols so that the output has no additional symbols. Hence Mege does not teach or suggest "correcting the symbol stream by incorporating substitution of symbols in the symbol stream where prior knowledge of the symbol stream exists" as recited in independent claims 20 and 23.

Critchlow, Liu and Tynderfeldt fail to overcome this deficiency and the Examiner does not state otherwise. Critchlow is cited for allegedly teaching estimating frequency offsets. Liu is cited for allegedly teaching identifying the training sequences of an arbitrary set of, or all, received bursts, and for allegedly disclosing sequences for normal burst and for dummy burst. Tynderfeldt is cited for allegedly teaching that dummy burst contains no intelligent information to mobile terminals. None of these references teach or suggest substitution of symbols as recited in the independent claims of the present invention.

It has been held by the courts that to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. See, *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). As illustrated above, the hypothetical combination of Mege and Critchlow and Liu and Tynderfeldt, taken in any combination, does not disclose or

suggest correcting the symbol stream by incorporating substitution of symbols in the symbol stream where prior knowledge of the symbol stream exists. Hence, this hypothetical combination does not disclose or suggest each and every feature recited in the independent claims, so that *prima facie* obviousness has not been established. Accordingly, independent claims 20 and 23 patentably distinguish over the art of record in the application. Claims 4-8, 12-19, 21 and 22 patentably distinguish over the cited references based at least upon the above-identified analysis and in view of their dependency, whether directly or indirectly, from claims 20 and 23. Claims 2 and 3 are canceled, rendering their rejections moot.

Accordingly, Applicant respectfully submits that all of the pending claims are patentable over the cited references.

#### New Claims

New independent claim 24 recites the step of using training sequences and correlation peaks for multi-path compensation.

The Examiner had acknowledged that Mege does not teach or suggest “the step of using training sequences and correlation peaks for multi-path compensation” in the Office Action mailed October 10, 2007 (page 8). However, the Examiner now contends that Mege teaches this feature in paragraphs [0084]-[0085]. Applicant respectfully disagrees that Mege teaches this feature. Mege teaches “extracting the information bit Z defined by the synchronization sequence” and transmitting a symbol source 40 which generates the symbols to be modulated with the exception of backward signaling (paragraph [0084]). Paragraph [0085] discloses:

A multiplexer 44 inserts the symbols issued by the coder 42 or 43 in those output by the source 40, complying with the frame structure with which the detection module 11 has acquired the synchronisation. The modulator 45 generates a baseband signal  $s'_n$  from the flow of symbols generated by the multiplexer 44 and this signal  $s'_n$  is processed by the transmitting part

of the radio stage 9, which forms the radio signal retransmitted by the terminal.

Mege does not teach or suggest correlation peaks or multi-path compensation, and does not teach or suggest using training sequences and correlation peaks for multi-path compensation, as recited in claims 24 and 25. Thus allowance of these claims is respectfully requested.

### **Conclusion**

Based upon the foregoing, Applicant respectfully requests the Examiner to withdraw the rejection of claims 4-8 and 12-23 pursuant to 35 U.S.C. § 103(a).

In view of the above, it is respectfully submitted that all of the claims in the application contain patentable subject matter and a Notice of Allowance is respectfully solicited. Should the Examiner believe that an interview would expedite prosecution of this matter, she is kindly requested to contact the undersigned.

Respectfully submitted,

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